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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,099	06/19/2003	Bohdan Konstantyn Zabawskyj	337133-00020	8416
27100	7590	EXAMINER		
(C/O PATENT	ADMINISTRATOR)		THIER, MICHAEL	
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			2617	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Occurrence	10/603,099	ZABAWSKYJ ET AL.				
Office Action Summary	Examiner	Art Unit				
	MICHAEL T. THIER	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>25 Ju</u>	ne 2008					
	action is non-final.					
<i>,</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1,25-30,32-42 and 44-47</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,25-30,32-42 and 44-47</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
	1. Certified copies of the priority documents have been received.					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list of the certified copies not received.						
Attach manut/a)						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
3) 🔲 Information Disclosure Statement(s) (PTO/SB/08) 5) 🔲 Notice of Informal Patent Application						
Paper No(s)/Mail Date <u>6/25/2008</u> . 6) U Other:						

## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments with respect to claims 1, 25-30, 32-42, and 44-47 have been considered but are not persuasive.

Applicant argues that the Harnesk reference itself is not proper since the PCT date is later than the instant application filing date.

In response to applicant's argument, the examiner respectfully disagrees. The examiner would like to note that the Harnesk application claims priority to a provisional application no. 60/418547, which has a filing date of Oct. 15, 2002. The Harnesk reference can be used as a proper reference as long as the provisional reference in some way teaches the cited elements (whether it be in the same wording or just a similar fashion). The examiner would like to note that the provisional reference need not have the same text as the non provisional reference (as argued by applicant on page 12 of the remarks) in order to make it proper prior art. The provisional reference explains the limitations cited from the non provisional reference at pages 3-5. For example, on page 3 of the provisional reference, it states, "When a user logs into the communication system, the packet forwarding system initiates a control signaling sequence to the control system. The control system determines the set of services identifiers this user is allowed to use. The rating engine part of the control system calculates "charging policy" based on a tariff plan and other input data (for example, time-of-day, the user's roaming status, the aggregated transferred data volume for the user). This calculation is illustrated in Figure 3 and is called "dynamic pre-rating". A "charging policy" includes of

a "user rating table" and set of validity conditions. The user rating table includes rating values for each "service class" the user is allowed to use. The "service class" concept is introduced to limit the size of the user rating table part of the charging policy. A "service class" is a family of services with the common property that they have exactly the same charging pattern (tariff plan). The charging policy is sent back to the packet forwarding system." (i.e. the examiner understands this to be similar to par. 78-88 of the non provisional reference)

Applicant further argues that Kalavade teaches away from the feature of sending an instruction from said access gateway to said rating element.

In response to the applicant's argument, the examiner respectfully disagrees. The mere fact that Kalavade teaches "a way" of doing the rating feature (i.e. the argued par. 232 from Kalvade, where he explains the actual rating is performed by the existing system and not the GBG), does not specifically mean that he teaches "away" from the invention and the combination proposed by the examiner. Kalvade simply performs the method in a different manner, and one of ordinary skill in the art could still have seen it obvious to make the combination in order to allow for the rating to be done in the CBG and therefore require no need for the CBG to couple to the operators existing billing system to transmit the usage information (i.e. so the existing system can perform the rating). This would thus require less signaling between the two systems since the CBG does not need to transmit the usage information to the existing billing system in order for the rating to be completed.

Applicant further argues that the examiner used improper hindsight and

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inaccurately reproduced the par. 14 of the Harnesk reference. (i.e. or page 5 of the provisional).

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In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The examiner would like to note that although the cited section for the motivation specifically recites that the reduced signaling is between the packet forwarding system and the control system, the idea of reducing signaling between any two systems is the motivation the examiner is pulling from this section. The reference may recite specific systems, but one of ordinary skill in the art at the time of invention would have found it obvious that by combining the Harnesk reference with the Kalavade reference would alleviate the need to the CBG to send usage information to the operators existing system, and thus reduce the signaling between the separate systems. Further, the examiner would like to note that the control system in Harnesk is clearly the rating engine, as seen in the provisional page 3 which shows the rating engine within the control system, and the packet forwarding system of Harnesk can be understood as the access gateway.

Please see the following rejection which has been adjusted to explain the newly

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added limitation of the instruction message being sent from the access gateway to the rating element.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 25-29, 31-32, 35-41, 43-44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalavade et al. (US 2003/0051041) in view of Takeuchi (US 2003/0134615) in further view of Harnesk et al. (US 2006/0008063).

Regarding claims 1 and 36. Kalavade teaches Wireless Local Area Network (WLAN) gateway system (abstract, par. 10-12).

an access gateway connected to a server; (figure 9 item 52)

a session controller connected to said access gateway; (figure 9 item 10)

a charging element connected to said session controller; (figure 9 billing modules, further see par 229, i.e. the CBG generates charging information.), said charging element maintaining charging details associated with a mobile handset (par. 249 and 251, accounting module collects information and the user data base module in the CBG contains user specific information.)

a rating element connected to said session controller; (figure 9 billing modules, which may read on rating element, however the examiner has provided the Harnesk

reference below to clearly describe the claimed rating element.), said rating element maintaining a rating profile information associated with said mobile handset. (par. 222 and 226, i.e. par. 222 states the accounting messages include information such as number of bytes and duration of session and par. 226 explains the accounting database stores accounting information, this reads on storing rating information.)

an interface connected to said access gateway for connecting a mobile handset to said access gateway via said interface; (figure 9, see the line connected between items 50 and 52, i.e. there must be some type of interface to allow them to connect, further see par. 216)

a computing device connected to said access gateway via a WLAN access network; (figure 9 item 50, connected through the wireless hotspot.)

said system being configured to perform a method for providing access to said server from said computing device, comprising the steps of:

receiving at said access gateway authentication information for a subscriber associated with said computing device; (par. 185-187)

sending a first message from said access gateway to said mobile handset; (par. 189, i.e. the secret token sent to the users phone.) and,

if a reply to said first message is received from said subscriber then permitting said computing device access said server; (par. 190-191) and

if no reply to said first message is received, then denying said computing device to access said server. (see par. 190-191, the CBG validates the user in the user returns

the secret, therefore it will not be validated if the secret is not returned and thus access will be denied.)

Kalavade further teaches the idea of sending an instruction from the access gateway to the charging element representing charging details associated with access of the server by the computing device in figure 32. (see the usage information accounting request message sent to the CBG from the router, further see par. 414-416.)

However, he does not specifically disclose that the system having a configurable interval, which the system will wait for the reply message to be received within.

Takeuchi teaches an authentication system for use with mobile phones (title and abstract). He teaches the idea that the device must return a response in a given time period or the authentication will fail and access will be denied (see par. 97 and figure 6 items s210 and s215) As seen in figure 6, and in par. 97, he teaches that if a reply (i.e. the authentication information) is received in the given time period the service is provided to the user, and if no authentication information is received within the configurable interval (i.e. predetermined or given time period), then the service is denied.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Takeuchi with the teachings as in Kalavade. The motivation for doing so would have been to ease the steps of authentication and restrain unauthorized access to the services. (Takeuchi, end of abstract)

Although Kalavade does specifically disclose the idea of sending instructions from the access gateway to the rating element and the charging element (i.e. the CBG)

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as seen in par. 414-416, for further clarification, the examiner would like to provide the Harnesk reference below to show the limitations regarding the rating element, and the sending instructions to the rating element to determine a rate for packets...

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Harnesk teaches a method and system for providing flexible charging in a communications network (title and abstract). He discloses the use of a control system (similar to that of the GBG explained in Kalavade) in figure 2 as item 201. In par. 39 he explains the charging system in figure 2 can be used for real-time charging purposes. This control system clearly comprises a rating engine (item 202). Harnesk teaches the idea of the access gateway sending an instruction to the rating element (par. 79-80, the rating engine accepts a request for a user rating table and receives the service class definition for each service class, and volume etc., also seen in the provisional page 3, which explains the packet forwarding system (i.e. the access gateway), initiates a control sequence to the control system, which contains the rating element), to determine a rate for packets carried between said computing device and said access network to establish a rate of charge of said packets according to a different classification assigned to each of said packets. (par. 85 the rating engine then calculates the relevant rating values). Further see par. 9, 45, and 75, where it is clearly explained that the packets can be charged differently depending on what service flow they belong to (i.e. rating each packet based on a classification.) As explained above, Kalavade teaches the idea of sending an instruction from the access gateway to the charging element representing charging details associated with access of the server by the computing device, however he did not explain the charging details where based on the rate. Again, Harnesk clearly

teaches sending instructions to a charging element (which can be understood in figure 2 as either item 202, charging policy decision point, or 207 charging policy enforcement point), and par. 88 which explains sending a user rating table in the form of a charging policy to the charging enforcement point.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Harnesk with the teachings as in the combination of Takeuchi and Kalavade. The motivation for doing so would have been to allow for providing a flexible real-time charging system, whereby signaling between systems is reduced (Harnesk par. 14)

**Regarding claims 25 and 37.** Kalavade teaches the access gateway comprises an authentication, authorization and accounting gateway. (figure 9 item 54)

**Regarding claims 26 and 38.** Kalavade teaches the gateway comprises a AAA server in figure 9 item 54.

Regarding claims 27-28 and 39-40. Kalavade further teaches the interface is a SMPP interface and the first message is a short message in par. 193. (i.e. The password is sent to the users phone using an SMS message, thus there must be an SMS interface.) He further teaches the short message sends information concerning the identity of said subscriber for the purpose of non repudiation in par. 193, (i.e. using a password for authentication reads on this limitation, also explains in par. 196 using the IMSI of the phone to validate the user.) Harnesk further teaches the idea of sending and receiving instructions for modifying subscriber preferences respective to a rate of charge (par. 25, i.e. operator specifies rules, or par. 85 where it is explained that the

rating values can be information about the users roaming status or geographical location.)

**Regarding claims 29 and 41.** Kalavade further teaches the interface is a USSD gateway in par. 193, 197, and 203.

Regarding claims 32 and 44. Kalavade further teaches charging details include incrementing a charge associated with Charging Detail Records (CDR). (par. 61)

Regarding claims 35 and 47. Kalavade further teaches using an HLR to access the USSD gateway in figure 21, see item 12.

4. Claims 30 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the grounds of rejection as applied to claims 1 and 36 above, and further in view of Schlieben et al. (US 2003/0096605).

**Regarding claims 30 and 42.** Kalavade, Takeuchi, and Harnesk teach the limitations of the previous claims.

However, they fail to distinctly disclose the limitations where one or more additional messages from the handset is received that includes instructions to modify the subscriber preferences associated with said access of the server via the gateway.

Schlieben teaches the idea of a user of a wireless device being able to edit or change preferences such as a "User Defined Blacklist" in par. 405. The idea of the user adjusting a blacklist reads on changing subscriber preferences associated with access to the server since it is well known in the art that a blacklist would be a list of users who are unable to access the network.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Schlieben with the teachings as in the combination of Kalavade, Takeuchi, and Harnesk. The motivation for doing so would have been to allow the user to create lists of users who can and cannot access the network.

5. Claims 33-34 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over the grounds of rejection as applied to claims 1 and 36 above and in further view of Brown et al. (US 2003/0112936).

**Regarding claims 33-34 and 45-46.** Kalavade, Takeuchi, and Harnesk teach the limitations of the previous claims.

However, they do not specifically disclose the idea that the access to the WLAN can be paid for using vouchers, credit card, or a prepaid account. The examiner would like to note that these are well known and obvious features in the communication billing art, and would have been obvious to one of ordinary skill in the art at the time of invention. However, to clearly show these limitations the secondary reference Brown is provided below.

Brown teaches a billing system, method, and program (abstract) which allows for all three of these types of payments. See par. 47 where he explains using vouchers to pay for minutes, and par. 126 for using a prepaid account, and finally par. 136 for using a credit card.

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Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the payment methods as in Brown with the system and method of authentication and billing in Kalavade, Takeuchi, and Harnesk. The motivation for doing so would have been to allow for a variety of payment methods, fitting all subscribers needs.

## Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. THIER whose telephone number is (571) 272-2832. The examiner can normally be reached on Monday thru Friday 7:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. T. T./ Examiner, Art Unit 2617 8/12/2008

/Duc Nguyen/ Supervisory Patent Examiner, Art Unit 2617